



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,096	05/30/2006	Nobukazu Shima	515.039US01	1822

34206	7590	10/22/2007
FOGG & POWERS LLC 10 SOUTH FIFTH STREET SUITE 1000 MINNEAPOLIS, MN 55402		

EXAMINER	
PIHULIC, DANIEL T	

ART UNIT	PAPER NUMBER
3662	

NOTIFICATION DATE	DELIVERY MODE
10/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@fogglaw.com

Office Action Summary

Application No.

10/596,096

Applicant(s)

SHIMA, NOBUKAZU

Examiner

Daniel Pihulic

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20070925 & 20060530</u> . | 6) <input type="checkbox"/> Other: ____. |

1. The title of the invention is not descriptive. A new title with 500 characters or less is required that is clearly indicative of the invention to which the claims are directed.
2. The abstract is not in compliance with 37 CFR 1.72(b) and MPEP §608.01(b). The abstract should be a single paragraph of 150 words or less commencing on a separate sheet following the claims.
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
5. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "said recognition process" in line 3;

claim 13 recites the limitation "said calculated correction value" in line 2; and

claim 13 recites the limitation "said recognition process" in line 3.

There is insufficient antecedent basis for these limitations in the claims.

Claims 8, 10, 11 and 15 are rejected for depending from the aforementioned rejected parent claims.

Claim 1 recites "a digital signal processing unit which takes outputs of said first to nth filter circuits" it is not quite clear how a digital signal processing unit could take the outputs of an analog filter.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 4, 5, 9 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US5940029. The US5940029 reference discloses the utilization of a radar apparatus (see title) comprising: a transmitter unit (71) which radiates a transmitter signal (see figure 17); a plurality of antennas ($11_1 - 11_N$) each of which receives a reflected wave produced by a reflection of said transmitter signal off an object; a first switch unit (12) which connects output terminals of said plurality of antennas in sequence (see abstract) and one at a time to an input terminal; a downconverting unit (13_c) which, by using a portion of said transmitter signal (13_b), downconverts a received signal input from said antenna connected to said input terminal of said first switch unit; a second switch unit (14) which connects an output of said downconverting unit to a selected one of first to nth filter circuits ($17_1 - 17_N$); outputs of said first to nth filter circuits are taken for input to first to nth AD converters ($20_1 - 20_N$); a digital signal processing

Art Unit: 3662

unit (see column 12, lines 45-55) which applies prescribed processing to first to nth output signals output from said first to nth AD converters and thereby detects distance (see column 3, lines 34-35) with respect to said object; and a signal characteristic checking units (24 & 25) which correct phase and amplitude characteristics as recited in claim 1.

With regards to claims 2, 4, 5, 9 and 14, the US5940029 reference discloses the utilization of units (24 & 25) which correct phase and amplitude characteristics.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pihulic whose telephone number is 571-272-6977. The examiner can normally be reached on Tuesday through Thursday and every other Monday and Friday from 5:30 a.m. to 4 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza, can be reached on 571-272-6979.

The fax phone numbers for the organization where this application or proceeding is assigned are:

571-273-8300 for official responses, and

571-273-6977 for unofficial communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the telephone number 800-786-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

**/Daniel Pihulic/
Daniel T. Pihulic
Primary Patent Examiner
T.C. Art Unit 3662**